DOCUMENT RESUME

ED 099 082 JC 750 022

AUTHOR Smith, O. Dale; And Others
TITLE Analysis of Factors Which Will Affect the Continued Development of Johnson County [Kansas] Community College for the Period 1974-1993: A Report and Recommendation of the JCCC Board-Staff Planning Committee.
INSTITUTION Johnson County Community Coll., Overland Park, Kans.
PUB DATE Apr 74
NOTE 46p.

EDRS PRICE MF-$0.75 HC-$1.85 PLUS POSTAGE
DESCRIPTORS *College Planning; *Educational Finance; *Enrollment Projections; *Junior Colleges; *Population Trends; Prediction; Space Utilization
IDENTIFIERS *Johnson County Community College; Kansas

ABSTRACT

Hoping to assure that the college remains responsive to the community, this study focuses on some of the factors which will affect Johnson County Community College's evolution over the next 20 years. Toward that end, the demographic features of Johnson County have been analyzed and projected as well as factors pertinent to and descriptive of college operation such as enrollment and revenue. The results of the projection studies are introduced by a chapter giving a brief history of the college's planning and construction. Projections are made concerning population, enrollment, room utilization, bonding debt capacity, special building funds, and expenditure and revenue. Tables and graphs are used to document estimates. The tabular appendixes show the projections through 1993. (Author/MJK)

ED 090082

BEST COPY AVAILABLE

ANALYSIS OF FACTORS WHICH WILL AFFECT THE CONTINUED DEVELOPMENT OF JOHNSON COUNTY COMMUNITY COLLEGE FOR THE PERIOD 1974-1993

A Report and Recommendations of the JCCC
Board-Staff Planning Committee

Submitted to

The JCCC Board of Trustees

April 10, 1974

JC 750 022

PREFACE

In its first six years Johnson County Community College has experienced an orderly growth from infancy to an enrollment of more than 4,000 credit and 5,000 non-credit students, and has moved from temporary facilities to a permanent campus located on a 220 acre site. It is the purpose of this report to bring into focus some of the diverse factors which will affect JCCC's evolution over the next 20 years and to initiate pertinent discussions to help assure that the development of the College through the 1970's and 1980's will continue to be deliberate, relevant and in keeping with the wishes and needs of the community it serves.

Although the Board feels that its published philosophy remains basically valid, it is periodically reviewed and refined to assure that it is viable. Whereas this philosophy identifies many areas of responsibility, limitations of capital and other resources force difficult choices among those responsibilities. Likewise as requests for a broader range of fine arts and vocational offerings are increasingly made, existing facilities and programs will become less adequate. The Board recognizes and accepts its responsibility in helping to identify priorities within the College but also recognizes that JCCC is itself a part of a larger community and hence under the constraints of collateral priority development of public institutions.

In this report the demographic features of Johnson County have been analyzed and projected. Similarly, factors pertinent to and descriptive of the College operation, such as enrollment and revenue, have been extended into the future. Upon reviewing the findings the committee believes it has compiled significant information that will be useful in planning the further development of JCCC.

With the completion of this report the Committee finds itself rather comfortable with its knowledge relative to the assigned task. At the same time the Committee believes that the usefulness of its findings will be enhanced by the systematic identification of future postsecondary educational needs of the community. Accordingly the Committee recommends that such a study be commissioned immediately.

From these two major studies -- the one presented here and the one recommended -- the Board and administrative staff should have the basis for outlining alternative courses of development for the College. Such a program will help assure that the continued evolution of JCCC is timely and appropriate.

Planning Committee

O. Dale Smith, Chairman
John Price
Robert G. Harris
Harold L. Finch

TABLE OF CONTENTS

		Page
I.	BACKGROUND	1
	Overview	1
	Campus Development: Phase I	3
	Site Selection	3
	Construction	4
	Budget	6
	Preliminary Plan (1969): Phase II	6
II.	LONG-RANGE CONSIDERATIONS	9
	Population Projections	9
	Enrollment Projections	11
	Room Utilization Projections	12
	Bonding Capacity Projections	13
	Special Building Fund Projections	14
	Expenditure and Revenue Projections	15
III.	RELIABILITY OF PLANNING FORECASTS	30
	Enrollment	30
	Enrollment Distribution	31
	Room Utilization	31
IV.	CONCLUSIONS AND RECOMMENDATIONS	33
	REFERENCES	34
	APPENDIX	35

I. BACKGROUND

Overview

Planning for Johnson County Community College was initiated in 1963. In the summer of that year the Johnson County Board of County Commissioners impaneled a committee for the purpose of conducting a community college needs and feasibility study. After an extensive analysis of student needs and aspirations, economic needs, population and school enrollment trends, expenditure requirements and revenue projections, the committee concluded that a community college in Johnson County was feasible and further, that the need was immediate.[1]

The first step in implementing the study committee's recommendations was the establishment of a Citizen's Action Committee. This was followed by a petition from the six public high school districts requesting the formation of a community junior college district. The petition received a favorable recommendation from the Kansas Advisory Council on Community Junior Colleges, and authorization for a county referendum was subsequently granted. The Citizen's Action Committee, in cooperation with local chapters of the League of Women Voters, the American Association of University Women and the Junior Chamber of Commerce, led a campaign culminating in March 1967 with a three-to-one affirmative vote to establish a community college. By order of the State Superintendent of Public Instruction the Johnson County Community Junior College District was formally established June 26, 1967. A charter board of trustees was elected in September 1967 and in July of the following year a president was appointed.

In early 1969, a master plan was developed for a permanent campus to serve 7700 students (5000 FTE*). Implementation of the master plan was initiated with the design of Phase I. Although this stage of the campus was generally planned for an enrollment of 4200 (2720 FTE), core facilities such as the library and gymnasium were designed to accommodate the ultimate enrollment.

The budget estimate for Phase I development was 12.9 million dollars broken down as follows:

° Construction	$9.1
° Land Purchase and Site Development	1.5
° Equipment	1.1
° Architectural Fees and Other Professional Services	0.6
° Contingency	0.6

A citizens committee, financed by voluntary contributions, was formed to promote the passage of the $12,900,000 bond referendum. In June 1969, the proposed bond issue passed by a margin of over 2.5 to 1.0. Construction was completed in 1972 and classes were held in the new facility in the fall of that year.

During the design and construction of the first phase of the permanent campus, classes were conducted in a number of temporary facilities: a church, an airport terminal, elementary education buildings, store fronts, and warehouses. Additionally, high school classrooms and laboratories were used for evening classes.

---

* FTE denotes "Full-Time Equivalent" student. Counting evening classes, the average JCCC student load is approximately 10 credit hours per semester (i.e., FTE = 0.65). Enrollments cited in this report do not include students registered in non-credit, continuing education programs. In the fall of 1973 there were over 5000 enrollments in this category. Non-credit courses are held off campus as well as on campus with the percentage of off campus instruction increasing as the campus approaches capacity utilization.

The first classes were held in 1969 with an enrollment of 1380 (900 FTE). This number has increased at a steady rate reaching 4107 (2643 FTE) in the fall of 1973 -- 97 percent of design capacity.*

Campus Development: Phase I

In order to achieve the goals and objectives central to the philosophy of the College, it was recognized from the outset that program, staff, and facility development must be closely integrated. To implement this approach in the acquisition and development of land, construction of buildings, and selection of furnishings and equipment, all aspects of planning were based on educational specifications. These staff-developed specifications were in turn predicated on such factors as projected student enrollment and educational needs of the community.

Site Selection: In September 1968 a three-member team from the Council for Educational Facility Planners was named to assist in reviewing JCCC site selection criteria and to recommend possible locations to the Board of Trustees. The most important site selection criteria were determined to be accessibility, environmental features, internal characteristics, size, and cost:[2]

1. Accessibility considerations focused on the ease with which the campus could be reached by students and citizens of the community.

2. Environmental features included aesthetic qualities, compatibility with other community elements, and isolation from major sources of smoke, dust, objectionable odors, and noise.

3. Internal characteristics included such factors as topography, shape, drainage, and freedom from transversal by major public trafficways.

4. Size considerations took into account projected enrollment, types of programs and services to be provided, vehicle access and parking requirements, future expansion, and potential land use of adjoining property.

---

* An analysis of past, present, and projected space utilization is presented on pages 12-13.

5. Cost factors included not only the original purchase price but also the cost of site development. The number of property owners to be involved in negotiations was also a consideration.

After screening approximately 50 available sites, six general areas were selected for further consideration. The site selection team visited the six areas and evaluated each on the basis of the prescribed criteria. Two areas were eliminated as a result of criteria deficiencies. The remaining four were assessed from a building design and construction viewpoint by Marshall and Brown, the architectural firm selected by the College for Phase I development.

The final evaluation was made by the site selection committee, and in December 1969 the Board authorized the purchase of 180 acres at the southwest section of 111th and Quivira Road. The original acquisition was subsequently augmented by an additional 40 acres to complete a 220 acre site for the permanent campus.

Construction: Phase I facility planning was preceded by an extensive needs survey conducted during November and December of 1968. This study produced information about the educational and occupational plans, expectations, and aspirations of the citizens and employers of Johnson County and of the Greater Kansas City area.[3] A subsequent analysis and forecast of the labor market conducted by the staff for the Kansas Master Planning Commission reaffirmed the previous findings and provided additional insights into the economic needs of the region.[4] Based on the results of these studies and upon interpretation of enrollment trends of existing comprehensive community colleges, initial JCCC curriculum and program plans were designed. This information in turn provided the foundation for the development of Phase I educational specifications.[5], *

---

* An ex post facto analysis of major underlying assumptions (e.g., enrollment distribution and space utilization) employed in the development of the JCCC educational specifications is presented in Section III of this report.

The completed first phase includes five buildings which provide a total area of 323,440 square feet. The cost of constructing and equipping the buildings was financed by a $12.9 million general obligation bond issue and $0.9 million supplemental federal funds. The final design plans were accepted by the Board and submitted for bids in November 1970. The estimate of the architectural firm was $9,843,326 for Phase I construction. In January 1971, the contract was awarded to Martin K. Eby Construction Company, Inc., the lowest of five bidders, for $9,480,000. The award was increased to $9,951,110 with the acceptance of thirteen alternates.

A sixth building, the College Commons, was financed by a $2.7 million revenue bond issue. This building, like the other five, was designed and constructed by Marshall and Brown and Martin K. Eby, respectively, and was completed for occupancy in December 1972.

Brief descriptions of the six Phase I buildings and parking areas follow:

- General Education Building: Three-story structure with 94,801 square feet houses general classrooms, faculty and administrative offices, 280-seat lecture theater, satellite library and various special rooms. Designed around central core with seminar rooms on all floors. Constructed so that additional modules can be added in subsequent phases of construction.

- Educational Media Center: Three-story building with 93,825 square feet designed for storage and distribution of library materials and production of media materials including slides, motion pictures, television, and printed matter. Built to accommodate enrollment of 7700 students (5000 FTE). Some space used on interim basis to house twelve general classrooms, art and drafting studios, instructional photography and electronics laboratories, and instructional offices.

- Science and Technology Building: Two-story building with 62,177 square feet includes satellite library, two division offices, office space for 40 instructors, two 75-seat lecture halls, one 100-seat lecture hall and space for additional 100-seat lecture hall. Science laboratory complex includes greenhouse, animal room, and laboratories for chemistry, Audio-Visual-Tutorial instruction, natural science, dental hygiene, and law enforcement programs. Stubbed-in laboratories provide for future expansion.

- Campus Services Building: Single-story, 22,514 square foot structure houses cooling portion of all-electric system, operation and maintenance facilities, administrative offices, central warehouse, maintenance shop, vehicle repair area, showers, and dressing room areas. Cooling towers, pump station, and vehicle storage area located in two adjacent screened yards. Building designed to serve enrollment of 7700 students (5000 FTE). In interim period expandable space used to accommodate some needs of limited art program.

- Gymnasium: Building with 50,123 square feet designed to serve athletic, recreational, and physical development requirements of persons of all ages, interests, and abilities and houses three cross-court gyms with space convertible to full-size Gymnasium with 2700 seats. Basement area contains weight room, wrestling room, classrooms, varsity dressing room, storage, and shower facilities. Administrative offices adjacent to lobby include conference room, space for ten faculty members, division office, and facilities for minor first aid care. Building has direct on-grade access to athletic playing fields.

- College Commons: Building with 58,940 square feet built on six levels houses bookstore, food services ranging from snack bar operation to dinner meetings accommodating from 10 to 500 persons, recreational facilities, lounges, meeting rooms, informational center and display area, and student activity offices. Designed for enrollment of 7700 students (5000 FTE).

The six buildings are located on a plateau near the center of the site with adequate surrounding space to provide a buffer against land development and to preserve a feeling of the agricultural heritage of the area. Parking for 1,840 vehicles is provided for students, staff, and visitors. Vehicular traffic and parking are visually concealed from the central campus.

Budget: A summary of revenues and expenditures required for the development of the Phase I campus is presented in Table 1.

Preliminary Plan (1969): Phase II

In view of the embryonic stage of JCCC in early 1969, planning at that time relative to the Phase II campus was necessarily of a preliminary nature. Square footage estimates were developed for each anticipated program by type of teaching space (i.e., lecture, laboratory, etc.) and from these data rough preliminary schematics of Phase II buildings were developed. A layout of the campus master plan prepared in 1969 is presented in Figure 1.

TABLE I

PHASE I BUDGET SUMMARY

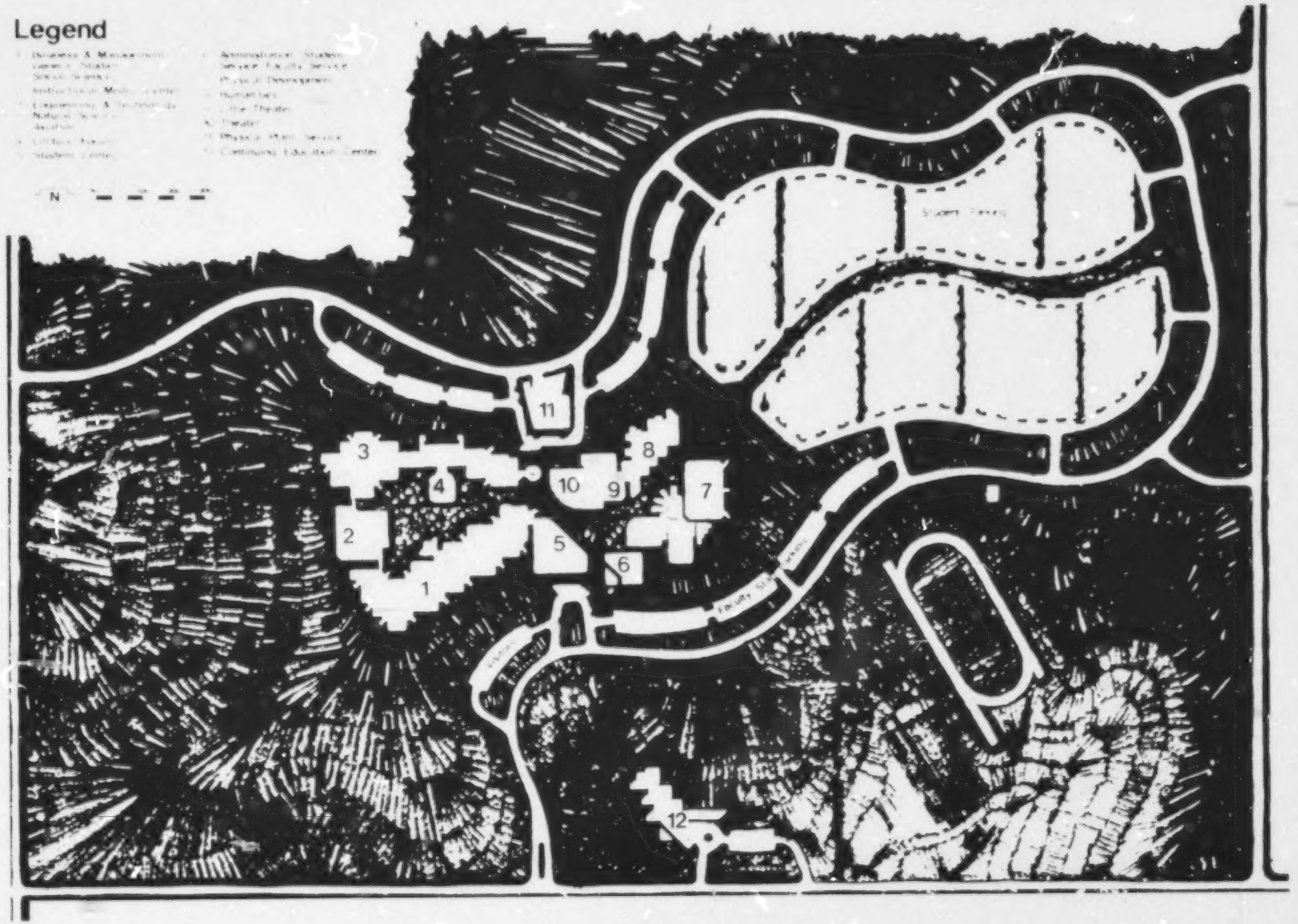
Phase I: First Five Buildings*		
Revenue		
General Obligation Bonds	$12,900,000	
HEW Grant #1	355,049	
HEW Grant #2	551,074	
Total Revenue		13,806,123
Expenditure		
Land Cost		741,631
Site Improvement		197,200
Site Work and Construction		9,965,347
Built-In Equipment		
General Education Building	25,600	
Science and Technology Building	163,409	
Gymnasium	40,184	
Central Services Building	1,155	
Educational Media Center	25,000	
		255,348
Equipment and Furniture		1,092,000
Architectural Fees		675,000
Administrative, Legal, and Other Fees		118,000
Contingency		761,597
Total Expenditure		13,806,123
Phase I: College Commons Building		
Revenue		
Revenue Bonds		2,690,000
Expenditure		
Site Work and Construction		2,280,098
Equipment and Furniture		60,263
Architectural Fees		136,806
Administrative, Legal, and Other Fees		25,190
Miscellaneous**		187,643
Total Expenditure		2,690,000

* General Education Building, Science and Technology Building, Gymnasium, Central Services Building, Educational Media Center.

** Includes capitalized interest ($147,693) and bond and interest reserve payment ($39,950).

Figure 1

1969 MASTER PLAN-JOHNSON COUNTY COMMUNITY COLLEGE



II. LONG-RANGE CONSIDERATIONS

In order to be able to develop realistic and timely facility plans on a long-range basis, it is necessary to develop sound forecasts of the following variables; population, enrollment, room utilization, capital bonding capacity, special building fund, operating revenue, and operating expenditures. Each of these parameters has been analyzed for the twenty year period 1974 through 1993.

Population Projections

A rigorous demographic analysis capability was developed to facilitate JCCC long-range planning. Need for this in-depth forecasting approach stemmed from an approximate ten year cycle of sharp fluctuations in the numbers of "college age" persons that has been characteristic of the period 1940 to date -- a phenomenon that is expected to continue at least through the 1980's.[6] Much of this fluctuation was and is predictable. The substantial increases in college enrollments in the 60's can be largely attributed to the increase in birth rates from the late 1930's to the late 1940's. For example, the Johnson County birth rate increased more than 300 percent between the years 1938 and 1948 as illustrated in Figure 2.

The population of the six counties which comprise the Kansas City Standard Metropolitan Statistical Area (KC SMSA) experienced a moderate rate of growth (1.5% per year) during the past decade (see Table 2). Extremes within the region ranged from a 0.6 percent increase for Kansas City, Missouri to a high of 5.1 percent for Johnson County. For the first two years of the present decade, the KC SMSA has continued to grow but at slightly slower rate (1.3% per year). Approximately 35 percent of the area's increase in 1971 and 1972 was attributed to Johnson County. For the previous decade the Johnson County portion of growth was 45 percent.

The most significant factor in Johnson County's rate of growth has been migration. The net flow of persons moving to the county is graphically presented in Figure 3 for the period 1910 to 1970. Currently, net-migration is down significantly, and if the depressed housing market continues for a prolonged period, the Johnson County growth rate will be substantially deterred.

Johnson County forecasts for the year 2000 are presented in Table 3 for three sets of birth rate and migration assumptions. It is projected that the population will continue to expand; however, the future rate of growth will be substantially less than in the past. The average increase per decade predicted by JCCC for 1970-2000 will be less than 20 percent of that of the previous thirty year period, 1940-1970. Population projections by 10 year age interval are presented in Figure 4. This set of forecasts assumes a continuation of current trends regarding such critical factors as land use, fertility rate, and migration.

Coincident with the projected growth in the number of county residents will be a geographical shift of the population centroid to the south and west. The anticipated movement is illustrated in Figure 5.* Also shown is the 1972 centroid of JCCC students.

From these projections it is concluded that:

1. The number of "college age" persons residing in Johnson County will increase through the end of the century except for a leveling off during the early 1980's.

2. The projected geographical shift of population is consistent with the finding made at the time of site selection that the permanent campus would eventually be close to the population center of Johnson County.

---

* Population Centroid is defined to be the geographic point in Johnson County where (1) one-half of the population lives north and one-half of the population lives south and (2) one-half of the population lives east and one-half of the population lives west. In 1970, for example, 108,831 lived north of 83rd Street and 108,831 lived south of 83rd Street while 108,831 lived east of Lowell and 108,831 lived west of Lowell.

Enrollment Projections

The most significant variable in postsecondary long-range planning is FTE enrollment. JCCC projections were based on the population forecasts of Johnson County and on empirically derived college participation and retention factors. Examination of past and projected enrollment trends, which are tabulated in Table 5 in the Appendix and are graphically presented in Figure 6, yields the following observations:

1. Enrollment has grown rapidly, but at a reducing rate, since the College's first class in 1969.

2. Enrollment is expected to grow, but less rapidly, through the 1970's.

3. Enrollment should reach a plateau at about 5900 (3800 FTE) during the early to mid-1980's.

4. Enrollment is projected to resume a rapid rate of growth in the 1990's substantially exceeding the 5000 FTE upon which the 1969 campus master plan was based.

JCCC's anticipated growth during the remainder of the 1970's will largely be due to continued increases in participation rates which will more than offset declines in the number of high school graduates during this period. The growth will come at a time when postsecondary enrollments throughout the state will level off or diminish. This will be a continuation of recent trends in which community college enrollments have increased while that of public four-year institutions have declined (see Figure 7).

Participation rates at JCCC in 1972 are presented by high school district in Table 4. One corclusion that may be drawn from this table is that the areas outside of the Shawnee Mission School District have the greatest potential for increased participation at the College. If this potential is fulfilled, the centroid of JCCC students will continue to shift south and west in the general direction of the permanent campus (see Figure 5).

Room Utilization Projections

The number of classrooms required to accommodate a given number of students enrolled in a given course is a function of the following variables:

- Number of hours per week in which classrooms are scheduled for instructional purposes
- Number of students per class
- Type of instruction (i.e., lecture, small discussion groups, laboratory, etc.)
- Number of credits for the course
- Ratio of course contact hours to credit hours

"Room Utilization Factor" is an expression of the degree to which the amount of classroom space is inadequate, adequate, or excessive as measured against desired (or standard) values for the above variables. For the lecture method of instruction, the following design standards for optimum room use were employed in JCCC Phase I space requirement calculations:[10,11,*]

- Average number of students per class - 25
- Classroom usage per week for credit courses - 33 hours

Likewise, similar sets of loading conditions were prescribed for the other methods of instruction.

Using the analytical procedures and assumptions employed in developing the Phase I educational specifications coupled with the enrollment projections illustrated in Figure 6, room utilization factors were forecast for the twenty year period through 1993. An examination of the

---

* The design standards used by JCCC in Phase I facility planning were based on the space utilization experiences of other comprehensive community colleges. The standards empirically reflect conditions unique to two-year institutions, particularly those in metropolitan areas. One such factor is the high percentage of students who work while attending college.

results, which are graphically presented in Figure 8, yields the following conclusions:

1. During the two years of occupancy of the permanent campus, enrollments resulted in classroom loading conditions that were less than design capacity.

2. Beginning in the fall of 1974, classroom utilization of the existing campus is expected to exceed design conditions and to increase progressively each succeeding year at least through the 1970's.

Careful study indicates that by making certain adjustments, program quality could be maintained with room utilization as much as 20 percent in excess of the design condition. Above 20 percent, overcrowding would have a significant detrimental effect on the instructional program. Therefore it is further concluded that:

3. Additional classroom facilities will be needed by the fall of 1977 and

4. Adequate space through the 1980's would be provided by increasing the number of classrooms by 40 percent.

Bonding Capacity Projections

The bonded debt capacity of JCCC is five percent of the sum of (a) 105 percent of the assessed valuation of the taxable, tangible property in Johnson County in 1968 plus (b) 105 percent of new improvements through the tax year 1974. The variables then for determination of bonded debt capacity are:

1. Assessed valuation;

2. Retirement of prior bonded indebtedness; and

3. Existing and future limitations imposed by the legislature.

In 1970 and 1971, general obligation bonds totaling $12,900,000 were issued to finance the development of the first phase of the permanent campus. At that time, the issuance of these bonds essentially depleted the College's bonding capacity.

Current and projected bonding capacity for construction was estimated using three assumptions:

Assumption A: Assumes annual taxable, tangible improvements for the years 1974-1993 to be a constant equal to the average for years 1969-1973.

Assumption B: Assumes the improvements defined in Assumption A to remain constant at the estimated current rate of 20 million dollars per year.

Assumption C. Assumes the improvements defined in Assumption A to increase at the rate of four percent per year.

The projected bonding capacities are tabulated in Tables 6, 7 and 8 in the Appendix and are graphically presented in Figure 9. Analysis of these data indicates that:

1. JCCC bonding capacity for new construction will be approximately seven million dollars in mid-1974.

2. JCCC cumulative bonding capacity for construction will be 30 to 40 million dollars by 1993.*

Special Building Fund Projections

The Special Buiding Fund, which is derived from a 1/2 mill levy, may be used for construction, reconstruction, repair, remodeling, additions to furnishing and equipping of school buildings, architectural expenses incidental thereto and the acquisition of building sites.** Revenue generated by this fund, if fully exercised, was projected through 1993 for each of the tax base assumptions employed in the forecasts of construction bonding capacity. The results which are presented in Tables 6, 7, and 8 of the Appendix and in Figure 10 indicate that:

---

* Conservative estimate based on: (1) current debt obligations and (2) the likely assumption that the legislature will extend the bonded debt limitations of K.S.A. 79-1440.

**Kansas Revised Statutes.

1. The JCCC Special Building Fund will generate about $185,000 in 1974 and will increase in annual yield to over $300,000 by the 1990's.

2. The anticipated revenue to be generated by the Special Building Fund would be sufficient to support necessary campus maintenance and upkeep on a long-range basis.

Expenditure and Revenue Projections

Expenditure projections were made for various rates of inflation. The estimates were made to represent *minimum* expenditure requirements via the use of conservative assumptions.* Projections, shown as dashed lines in Figure 11 are for 2.5 and 5.0 percent growth rates, where the rates are based on the budget required to support *existing* staff and related expenditures. Detailed results and intermediate values are presented in Table 9 of the Appendix.

Two revenue projections were made: one assumed continuation of existing legislation and state aid and tuition rates; the other incorporated the same assumptions but further assumed the removal of limitations imposed by the so-called tax lid law of 1973.** The results, which are superimposed on the expenditure grid of Figure 11 are supplemented by detailed data in Table 10 in the Appendix.

---

* The following basic assumptions were made in projecting the College's expenditure requirements:

1. Instructional staff would be added to accommodate student growth, but there would be no allowance for correspondingly increasing the usage of supplies, clerical services and other budget items which are not included in the instructional salary category.
2. Additional instructional staffing would be filled equally on a full-time:part-time basis.

Obviously such assumptions could not be sustained over a period of years without adversely affecting the quality of the instructional program.

** Chapter 393 of the Session Laws of 1973. (This legislation and the less restrictive junior college lid laws, Chapter 274 (1973), supersede the reassessment limitations of KSA 79-1440). Relief from the tax lid law limitations may be attained by submitting the matter to popular vote.

An examination of the operating expenditure and revenue inter-relationships exhibited in Figure 11 yields the following observations:

1. Assuming existing legislation and budget limitations and assuming minimal expenditures to accommodate student growth, the projected revenue would be able to support no more than an annual inflationary rate of approximately three percent through 1993-94.

2. Based on the same limiting assumptions as in (1) above, the projected revenue should be able to support an annual rate of inflation of five percent through 1979-80.

3. The removal of existing tax lid law limitations should make it possible to accommodate a five percent expenditure growth rate through the early 1980's.

4. It appears that some form of operating budget relief may be needed sometime during the mid to late 1970's.

Figure 2

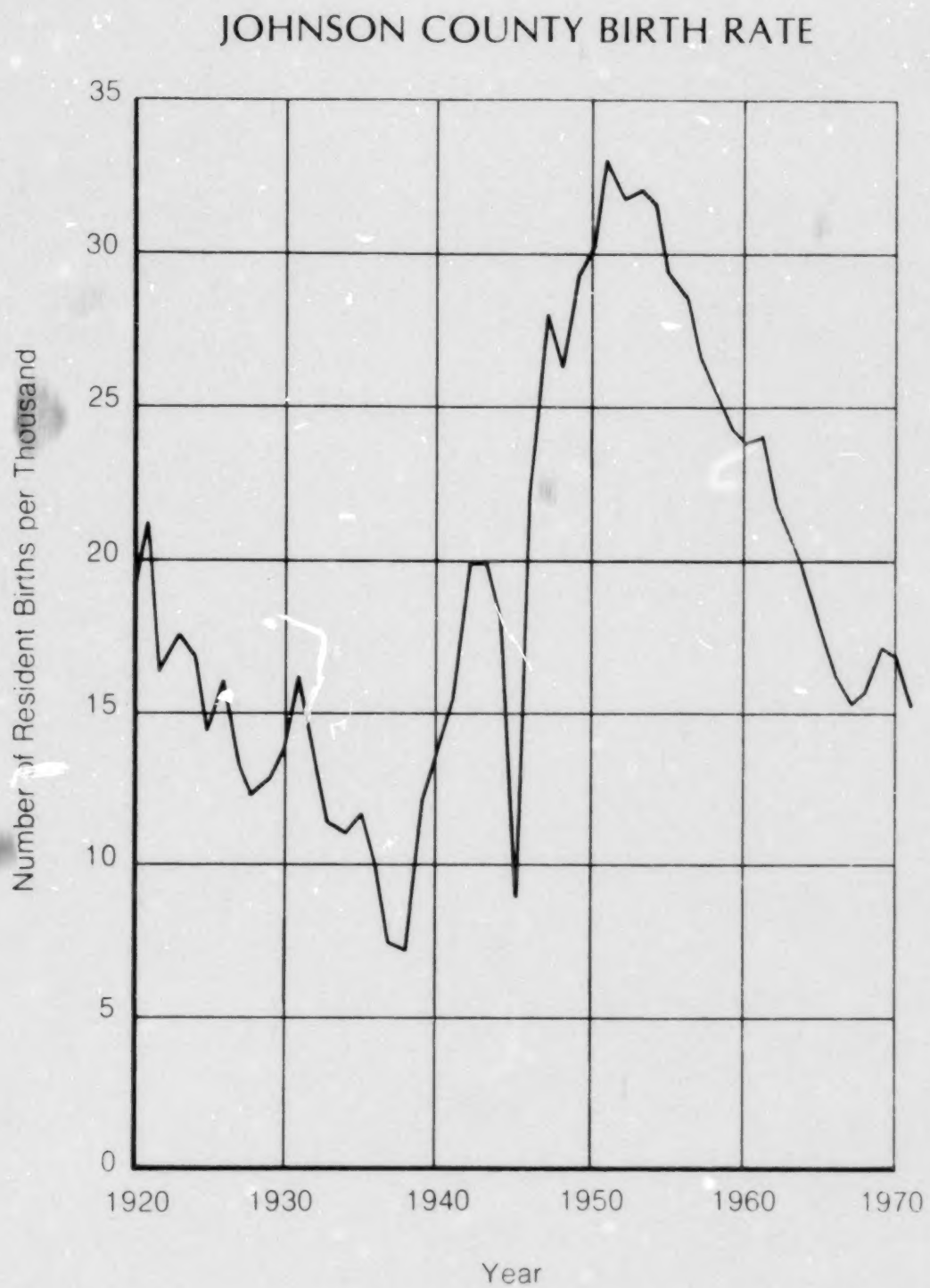

JOHNSON COUNTY BIRTH RATE
Number of Resident Births per Thousand
35
30
25
20
15
10
5
0
1920
1930
1940
1950
1960
1970
Year

TABLE 2

POPULATION, KANSAS CITY STANDARD METROPOLITAN STATISTICAL AREA, 1960 AND 1970

	Population		Average Annual Increase	
	1960	1970	1960-1970	1970-1972*
Kansas City, Missouri	476,000	507,000	3,100(0.6%)	NA
Johnson County	143,792	217,662	7,387(5.1%)	5,208
Remainder of KC SMSA*	472,753	529,254	5,650(1.2%)	NA
TOTAL KC SMSA	1,092,545	1,253,916	16,137(1.5%)	14,586

* Cass, Clay, Jackson and Platte Counties in Missouri; Johnson and Wyandotte counties in Kansas.

Note.--The sources for the 1960 and 1970 population data are references 7, 8 and 9.

Figure 3

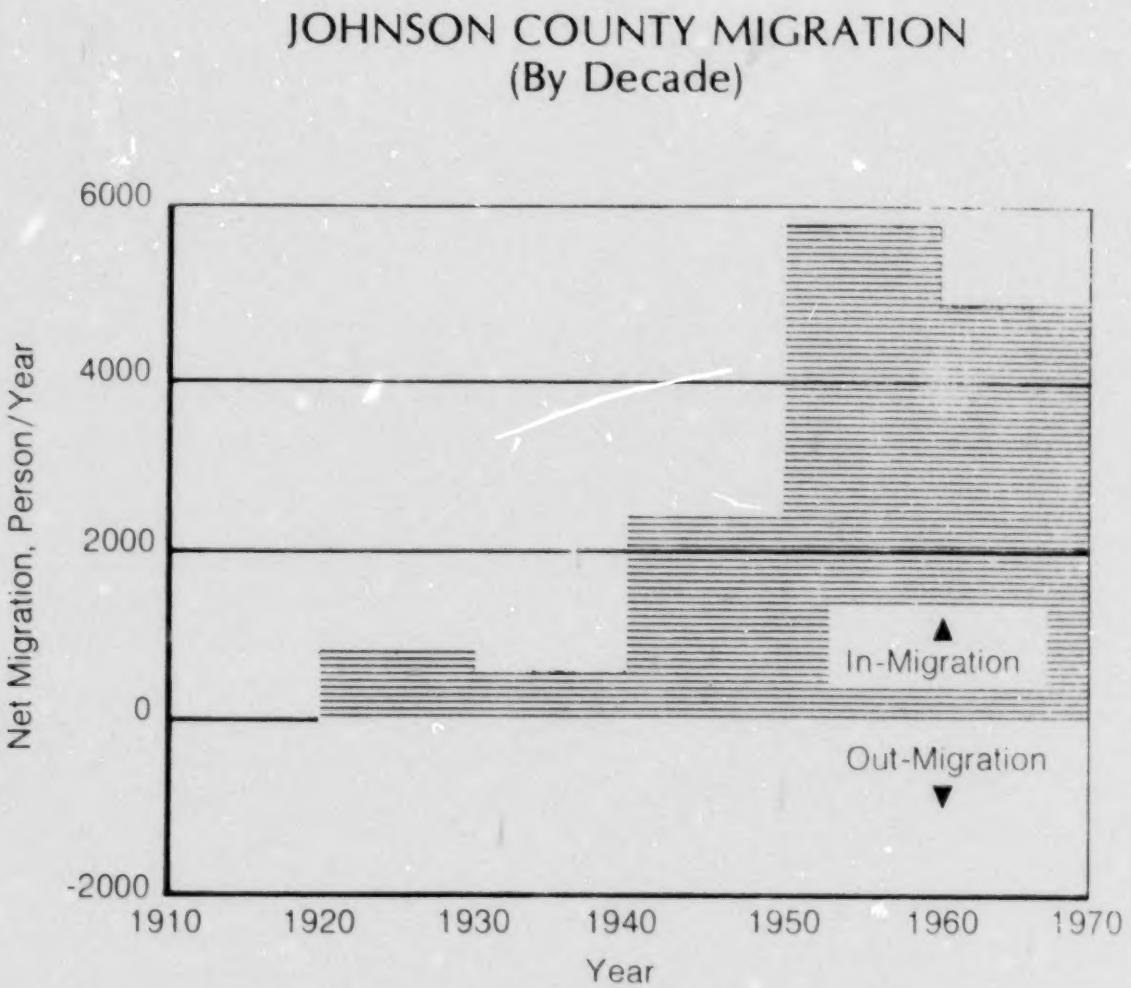

JOHNSON COUNTY MIGRATION
(By Decade)
6000
4000
2000
0
-2000
Net Migration, Person/Year
In-Migration
Out-Migration
1910
1920
1930
1940
1950
1960
1970
Year

TABLE 3

POPULATION, JOHNSON COUNTY, ACTUAL AND ESTIMATED, 1940-2000

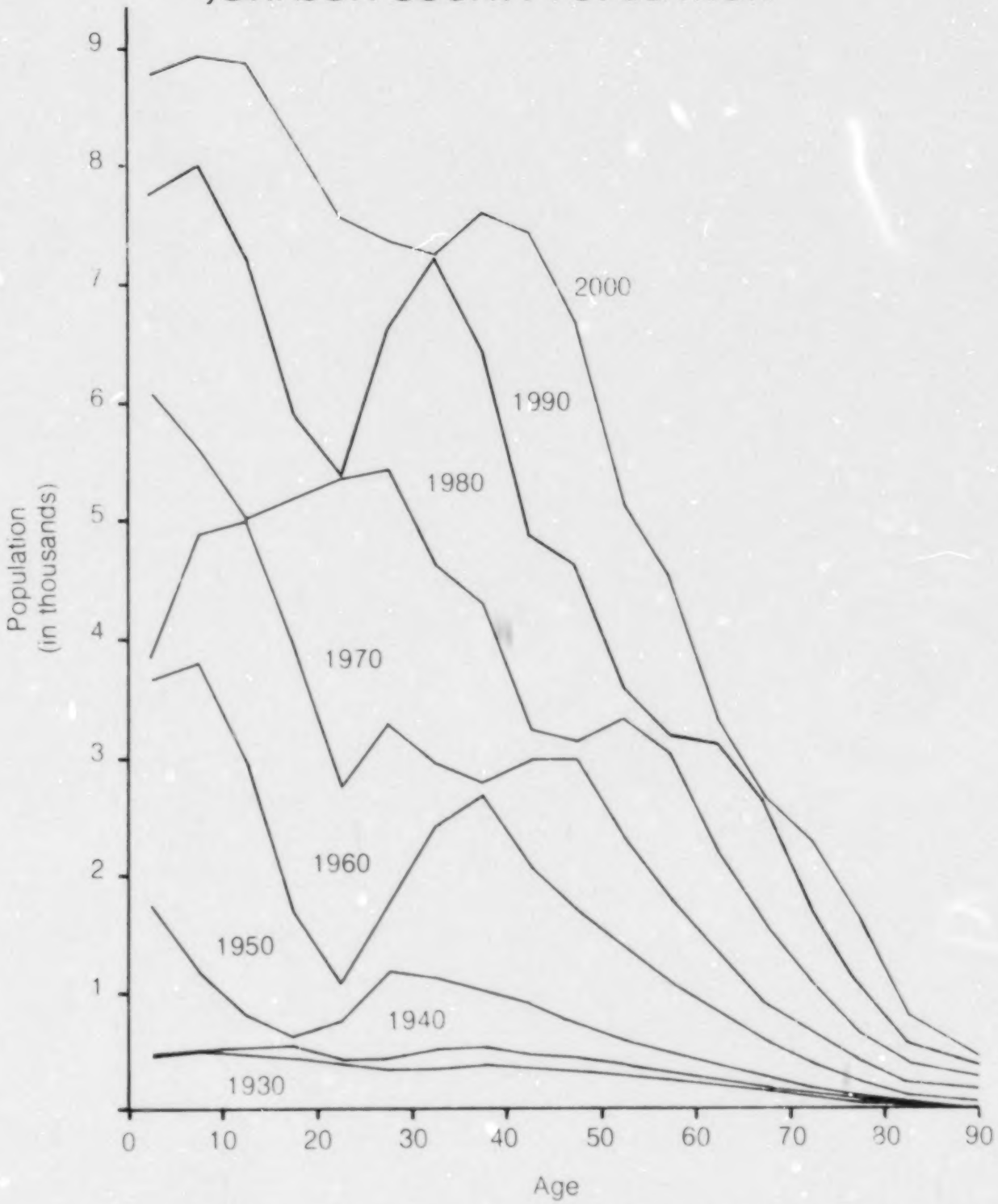
Year						
				2000		
1940	1950	1960	1970	Low Est.	Nom.Est.	Mig.=0
33,327	62,783	143,792	217,662	443,335	498,114	308,192

Average Growth Per Decade:

1940-1970	1970 - 2000		
	Low Est.	Nom.Est.	Mig.=0
61,445	75,224	93,484	30,177
(184%)	(35%)	(42%)	(14%)

Figure 4

JOHNSON COUNTY POPULATION



Note: Data were plotted by five year increments at mid-point of age group. For example, data for persons age five through nine were plotted at age 7.5 since an individual remains nine until the day of the tenth birthday. To compensate for five ages being plotted at one age, the number in thousands was divided by five to permit estimates of numbers of persons by one year increments.

Figure 5

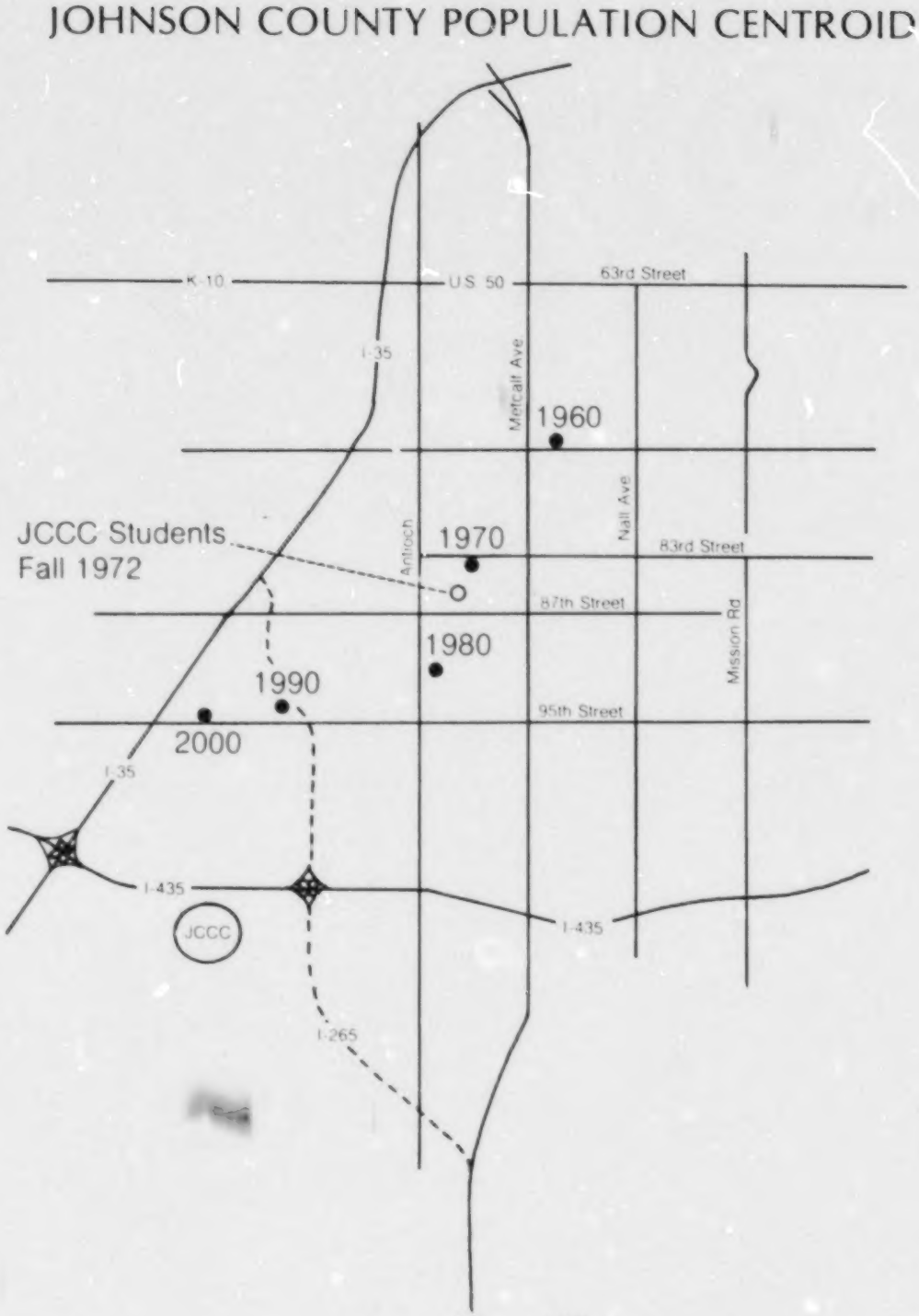

JOHNSON COUNTY POPULATION CENTROID
K-10
US 50
63rd Street
I-35
Metcalf Ave
1960
Antioch
1970
Nall Ave
83rd Street
JCCC Students
Fall 1972
87th Street
1980
Mission Rd
1990
95th Street
2000
I-35
I-435
JCCC
I-435
I-265

Figure 6

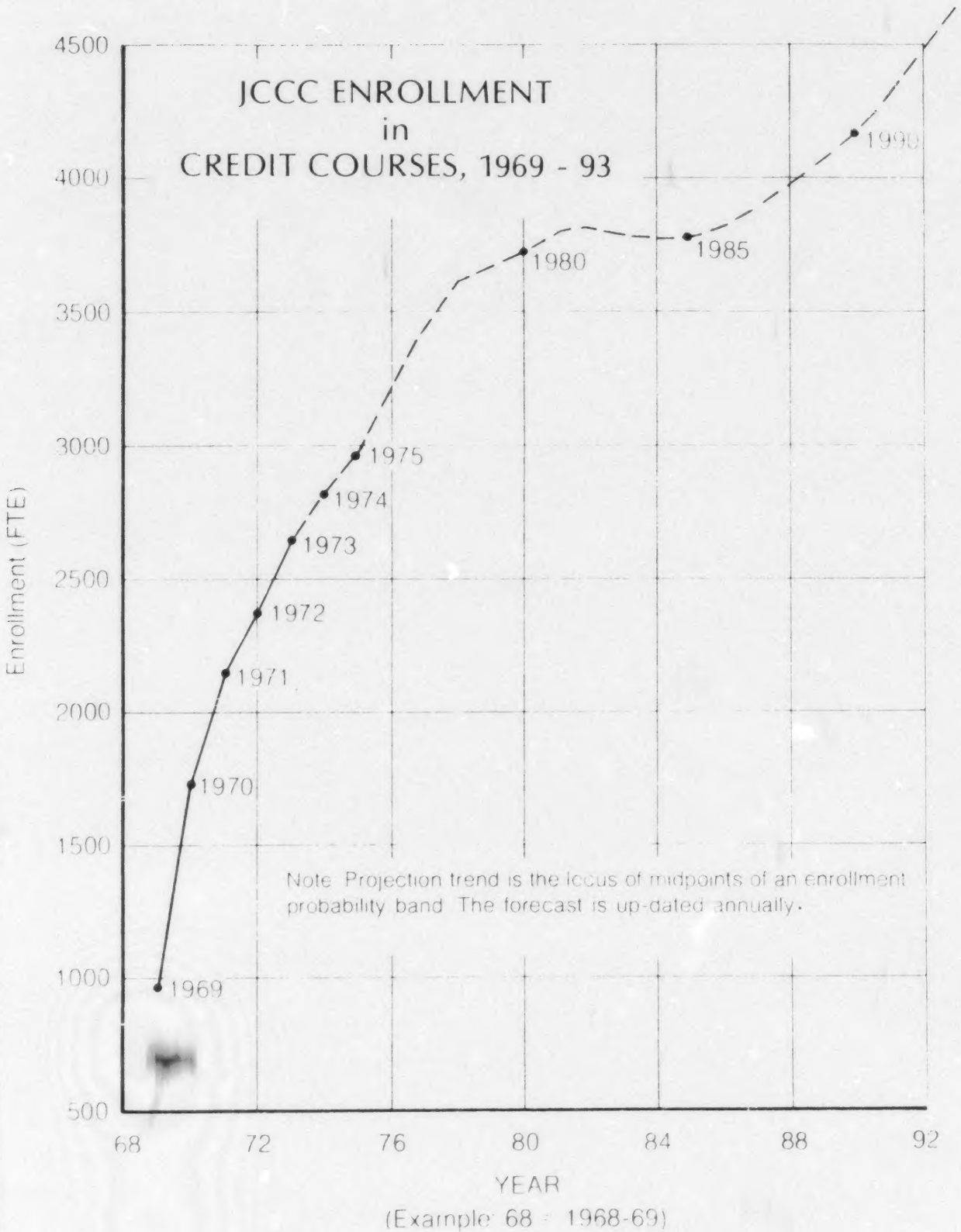
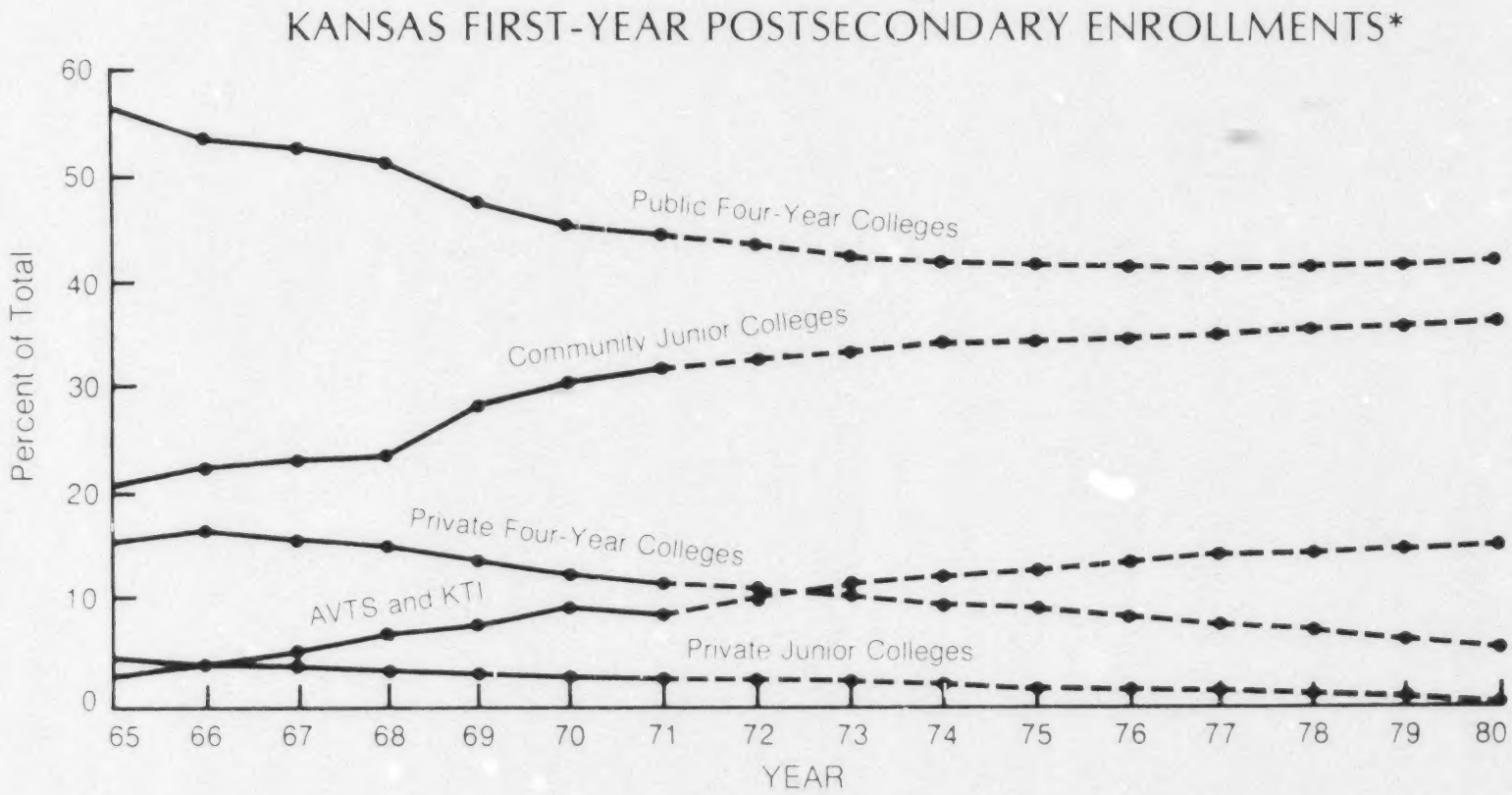

JCCC ENROLLMENT
in
CREDIT COURSES, 1969 - 93
4500
4000
3500
3000
2500
2000
1500
1000
500
Enrollment (FTE)
1969
1970
1971
1972
1973
1974
1975
1980
1985
1990
Note: Projection trend is the locus of midpoints of an enrollment probability band. The forecast is up-dated annually.
68
72
76
80
84
88
92
YEAR
(Example: 68 = 1968-69)

Figure 7



*Projections based on existing system of institutions and current legislative, social, economic, educational and cost escalation trends

TABLE 4

JCCC PARTICIPATION FACTOR BY AGE AND HIGH SCHOOL DISTRICT, FALL 1972

Age Cohort	No. of Johnson County Residents	No. of JCCC Resident Students	Participation Factor							
				High School District (Approx. Boundaries)						
			Overall	South	North	East	West	N.W.	Olathe	Other
15-17	13,997	818	.0584	.0591	.0744**	.0479	.0669	.0638	.0403*	.0395*
18-19	8,161	981	.1202	.1237	.1309	.1087	.1705**	.1405	.0682*	.0437*
20-24	17,019	699	.0411	.0403	.0427	.0350	.0487	.0489	.0379	.0164*
25+	123,884	899	.0072	.0047*	.0069	.0048*	.0103**	.0093**	.0125**	.0039*
	Total No. Students:		3397	541	657	446	648	693	300	122

* Participation Factor less than the county-wide average by at least 20%.

** Participation Factor greater than the county-wide average by at least 20%.

Figure 8

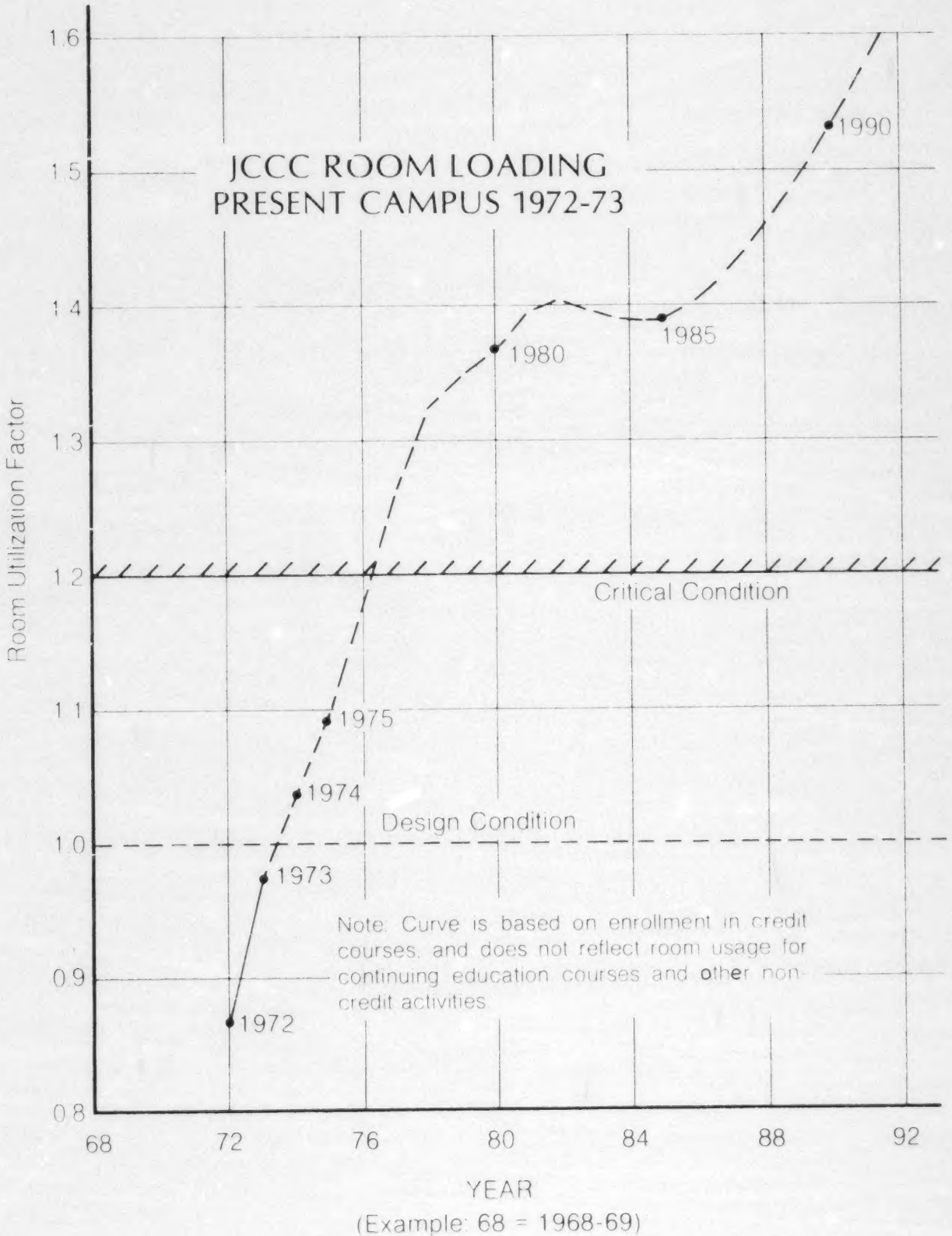

JCCC ROOM LOADING
PRESENT CAMPUS 1972-73
Room Utilization Factor
1.6
1.5
1.4
1.3
1.2
1.1
1.0
0.9
0.8
1990
1985
1980
1975
1974
1973
1972
Critical Condition
Design Condition
Note: Curve is based on enrollment in credit courses, and does not reflect room usage for continuing education courses and other non-credit activities.
68
72
76
80
84
88
92
YEAR
(Example: 68 = 1968-69)

Figure 9

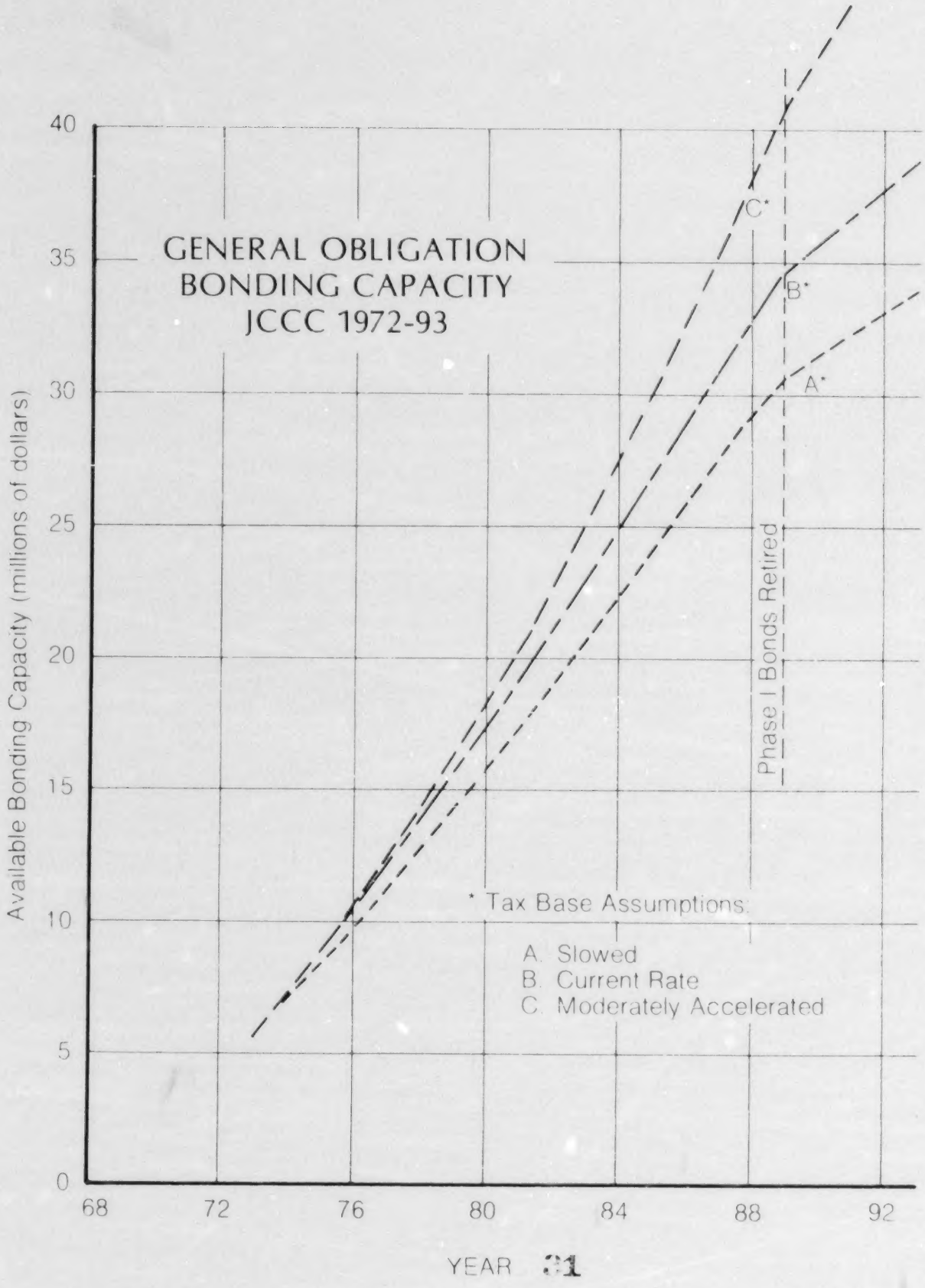

GENERAL OBLIGATION
BONDING CAPACITY
JCCC 1972-93
Available Bonding Capacity (millions of dollars)
40
35
30
25
20
15
10
5
0
68
72
76
80
84
88
92
YEAR
C*
B*
A*
Phase I Bonds Retired
* Tax Base Assumptions:
A. Slowed
B. Current Rate
C. Moderately Accelerated

Figure 10

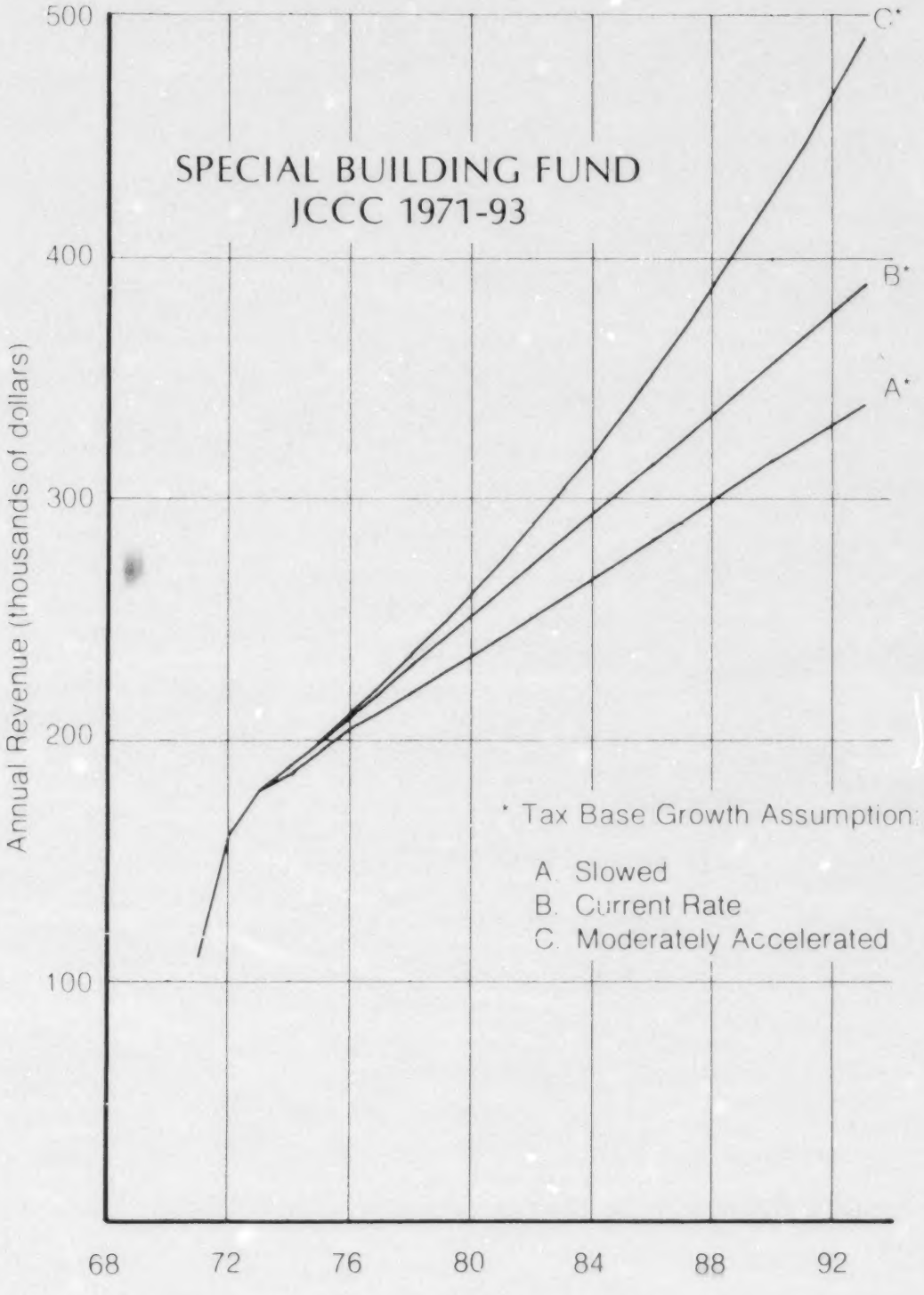
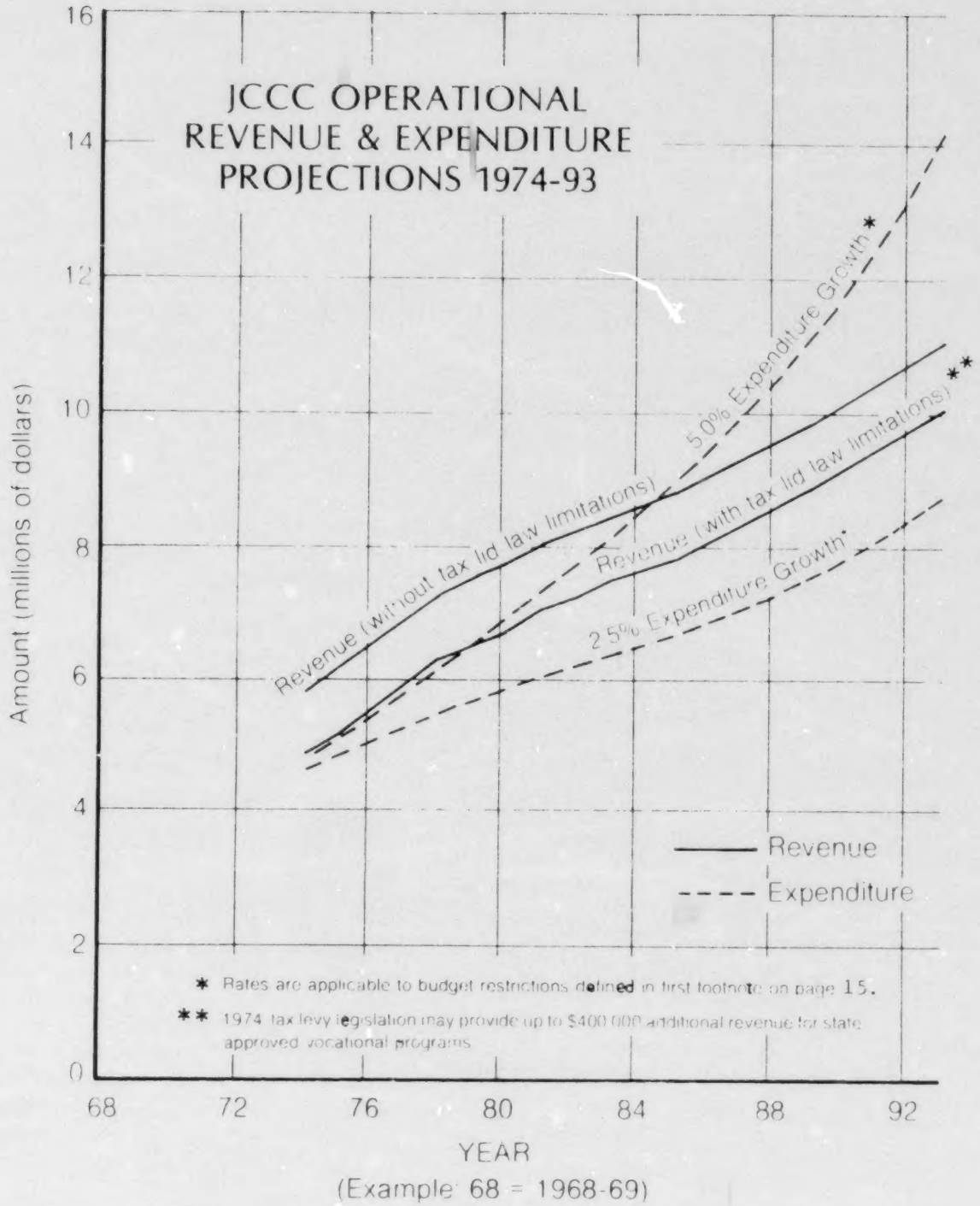

SPECIAL BUILDING FUND
JCCC 1971-93
500
400
300
200
100
Annual Revenue (thousands of dollars)
C*
B*
A*
* Tax Base Growth Assumption:
A. Slowed
B. Current Rate
C. Moderately Accelerated
68
72
76
80
84
88
92
YEAR

Figure 11


JCCC OPERATIONAL
REVENUE & EXPENDITURE
PROJECTIONS 1974-93
Amount (millions of dollars)
16
14
12
10
8
6
4
2
0
68
72
76
80
84
88
92
YEAR
(Example: 68 = 1968-69)
Revenue (without tax lid law limitations)
5.0% Expenditure Growth*
Revenue (with tax lid law limitations)**
2.5% Expenditure Growth*
Revenue
Expenditure
* Rates are applicable to budget restrictions defined in first footnote on page 15.
** 1974 tax levy legislation may provide up to $400,000 additional revenue for state approved vocational programs.

III. RELIABILITY OF PLANNING FORECASTS

As indicated in Section II there are many factors involved in long-range facility planning. The reliability of the overall planning process is particularly dependent on the forecast accuracy of three of the factors: enrollment, enrollment distribution by discipline and room utilization.

Enrollment

Because of ever changing social, economic, and political conditions, enrollment forecasting sometimes seems to be more of an art than a science. Yet meaningful projections can be reliably made if the forecasting procedures to be employed meet the following criteria:

1. They involve in-depth, systematic, and interactive analysis of the pertinent independent variables;

2. They are continually "tuned" and up-dated; and

3. They are forward looking (i.e., the procedures do not just project the past, but rather they analyze a range of future alternatives or "what if" conditions).

JCCC has taken this approach to forecasting, and to date the results have been dependable. In 1965, the citizen's study committee estimated the proposed college's enrollment to be 2800 FTE in 1975. Based on a 1973 enrollment of 2643 FTE and the current rate of growth, it is likely that the ten year projection will prove to be extremely accurate. On a short-range basis, enrollment forecasts used for budget planning have been consistently reliable.

Although the accuracy of JCCC's current long-range enrollment forecasts can not be assessed at this time, the past record and demographic capability in this field tend to generate confidence in the projections.

Enrollment Distribution

Because of the different types of instructional spaces used from course to course, program to program, and discipline to discipline, projected enrollment distribution by course, program, and discipline is especially important in facility planning. Thus the implementation of an educational needs survey was an essential forerunner to the development of Phase I educational specifications.

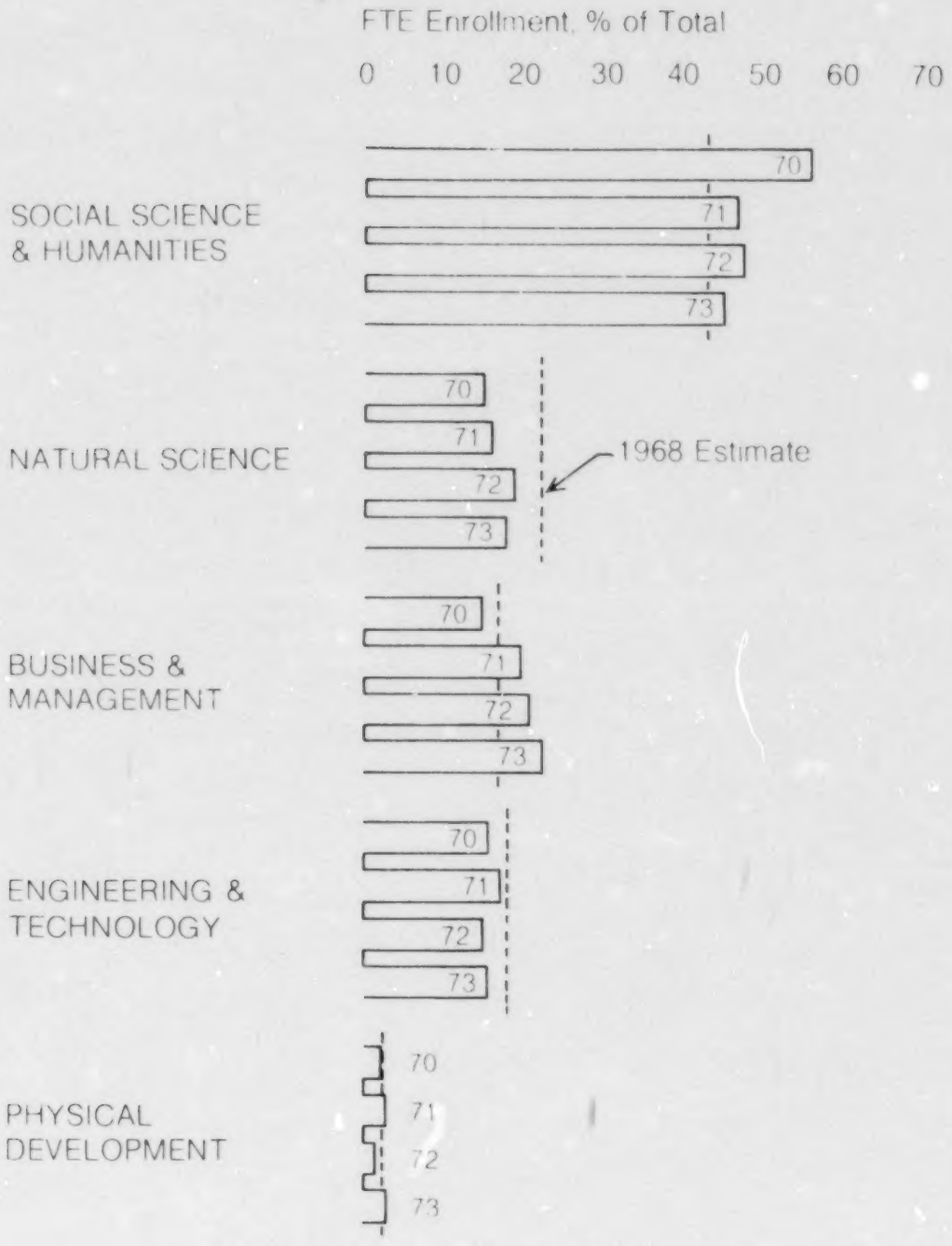
Distribution forecasts employed in the JCCC specifications have proven to be accurate. Estimated and actual enrollment splits by discipline are compared in Figure 12.

Room Utilization

The reliability of room utilization projections is difficult to assess because of an inability to quantify "crowdedness" in a non-arbitrary manner. However, as the campus reached 97 percent design capacity in the fall of 1973, there were, for the first time, indications that classroom space was becoming scarce. Based on the fall 1973 room scheduling experience, it is concluded that the space utilization forecasts for the permanent campus are reasonable.

Figure 12

JCCC ENROLLMENT DISTRIBUTION 1970-73



IV. CONCLUSIONS AND RECOMMENDATIONS

Analysis of the foregoing information yields the following conclusions:

1. The growth of Johnson County is continuing to shift the centroid of population toward the southwest and, as anticipated, the centroid will closely approach the current campus site.

2. Based only on enrollment in credit courses the campus has reached the ideal design state and credit will be at a utilization factor of 1.2 in the 1976-77 school year. (1.2 utilization factor is considered to be the maximum acceptable level.)

3. Adequate bonding capacity exists under current law to meet the projected expansion needs and will still be adequate should additional construction be required in the 1990's.

4. The special building fund levy will be adequate to maintain present facilities and should increase sufficiently to meet the maintenance costs for the expanded facilities.

5. By 1976, the annual operating budget will not be adequate to support the existing program under current legislative restrictions.

6. JCCC forecasts and planning approaches to date have been dependable.

7. The usefulness of the findings of this report will be enhanced by the systematic identification of future postsecondary educational needs of the community. Accordingly the Committee recommends that such a study be commissioned immediately. From these two major studies -- the one presented here and the one recommended -- the Board and administrative staff should have the basis for outlining alternative courses of continued development of the College.

REFERENCES

1. *A Community College Study for Johnson County: A Report on the Needs and Feasibility of a County Community College,* Johnson County Community College Study Committee, Johnson County, Kansas, December 1966.

2. *Campus Development Report No. 4: Site Selection,* Johnson County Community College, Shawnee Mission, Kansas, May 1969.

3. *Educational Needs Survey of Johnson County Kansas 1969,* Institute for Community/College Development, Johnson County Community College, Shawnee Mission, Kansas, May 1969.

4. *Projection: Educational and Training Requirements of the Kansas Economy to 1985,* Kansas Master Planning Commission, Topeka, Kansas, August 1971.

5. *Educational Specifications for Johnson County Community College,* Johnson County Community College, Shawnee Mission, Kansas, May 1969.

6. *Historic and Projected Population Data for Johnson County, Kansas,* Institute for Community/College Development, Johnson County Community College, Overland Park, Kansas, May 1973.

7. *1960 Census of Population and Housing: Kansas City, Mo.-Kans. SMSA,* U.S. Department of Commerce, Washington, D.C., May 1962.

8. *1970 Census of Population and Housing: Kansas City, Mo.-Kans. SMSA,* U.S. Department of Commerce, Washington, D.C., May 1972.

9. *Current Population Reports,* "Federal-State Cooperative Program for Population Estimates," Series P-26, Nos. 43,45.

10. *Guide for Planning Community College Facilities,* The Division of Field Studies and Research, Graduate School of Education, Rutgers - The State University, New Brunswick, New Jersey, 1964.

11. *Northwest Valley College Master Program,* Los Angeles City Schools, School Planning Division, Educational Housing Branch, Los Angeles, California, April 1965.

APPENDIX

TABLE

JCCC ENROLLMENT ANALYSIS AND PROJECTIONS THROUGH 19

Year	Public H.S. Seniors Out	S.M.	Total	Jo Co 17½ Pop.[a] Est.A	Est.B[b]	JCCC FTE (Actual) Frosh	Soph	Total	JCCC Participation Factors: Best Fit Method[c] 12-13[d]	13-14[e]	Modified Best Fit Method[c] 12-13[d]	13-14[e]	JCCC FTE (Estimated): Pop. Est.B, Best Fit Frosh	Soph	Total	Pop. Est.B, Modified Best Fit Frosh	Soph	Total	Averaged Frosh	Soph	Total
1968	494	2829	3323	2575	2575	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1969	526	3016	3542	3002	3002	865	97	962	0.288	--	--	--	--	--	--	--	--	--	--	--	--
1970	528	3105	3633	3798	3788	1230	502	1732	0.324	0.580	--	--	--	--	--	--	--	--	--	--	--
1971	557	3277	3834	4093	4093	1523	608	2131	0.372	0.494	--	--	--	--	--	--	--	--	--	--	--
1972	649	3346	3995	4284	4284	1600	764	2364	0.373	0.502	--	--	--	--	--	--	--	--	--	--	--
1973	701	3180	3881	4528	4350	1822	821	2643	0.419	0.513	--	--	--	--	--	--	--	--	--	--	--
1974	--	--	--	4780	4420	--	--	--	0.423	0.495	.437	.512	1878	902	2780	1931	933	2864	1905	917	2822
1975	--	--	--	4986	4528	--	--	--	0.440	0.495	.452	.508	1992	930	2922	2047	981	3028	2020	955	2975
1976	--	--	--	5078	4780	--	--	--	0.455	0.495	.465	.507	2175	986	3161	2223	1038	3261	2199	1012	3211
1977	--	--	--	5056	4986	--	--	--	0.465	0.495	.473	.505	2318	1077	3395	2368	1123	3491	2343	1100	3443
1978	--	--	--	5078	5078	--	--	--	0.475	0.495	.483	.505	2412	1147	3559	2453	1196	3649	2433	1171	3604
1979	--	--	--	5156	5056	--	--	--	0.480	0.495	.490	.505	2428	1194	3622	2477	1239	3716	2452	1216	3668
1980	--	--	--	5243	5078	--	--	--	0.486	0.495	.495	.505	2468	1202	3670	2514	1251	3765	2492	1226	3718
1981	--	--	--	5238	5156	--	--	--	0.490	0.495	.500	.505	2526	1222	3748	2578	1269	3847	2553	1245	3798
1982	--	--	--	5170	5120	--	--	--	0.492	0.495	.502	.505	2519	1250	3769	2570	1302	3872	2545	1276	3821
1983	--	--	--	5060	5060	--	--	--	0.494	0.495	.504	.505	2500	1247	3747	2550	1298	3848	2525	1272	3797
1984	--	--	--	5010	5020	--	--	--	0.497	0.495	.507	.505	2495	1238	3733	2545	1288	3833	2520	1263	3783
1985	--	--	--	4997	5000	--	--	--	0.500	0.495	.510	.505	2500	1235	3735	2550	1285	3835	2525	1260	3785
1986	--	--	--	5060	5060	--	--	--	0.500	0.495	.510	.505	2530	1238	3768	2581	1288	3869	2555	1263	3818
1987	--	--	--	5180	5170	--	--	--	0.500	0.495	.510	.505	2585	1252	3837	2637	1303	3940	2611	1277	3888
1988	--	--	--	5370	5280	--	--	--	0.500	0.495	.510	.505	2640	1280	3920	2693	1332	4025	2666	1306	3972
1989	--	--	--	5550	5400	--	--	--	0.500	0.495	.510	.505	2700	1307	4007	2754	1360	4114	2727	1333	4060
1990	--	--	--	5741	5550	--	--	--	0.500	0.495	.510	.505	2775	1336	4111	2830	1391	4221	2803	1363	4166
1991	--	--	--	5940	5730	--	--	--	0.500	0.495	.510	.505	2865	1374	4239	2922	1429	4351	2894	1401	4295
1992	--	--	--	6200	5960	--	--	--	0.500	0.495	.510	.505	2980	1418	4398	3040	1476	4516	3010	1447	4457
1993	--	--	--	6440	6200	--	--	--	0.500	0.495	.510	.505	3100	1475	4575	3162	1535	4697	3131	1505	4636

a. Based on JCCC demographic analysis of Johnson County.
b. Includes an adjustment for 1973-75 for assumed continuation of current decline in net migration.
c. The two methods of projecting the JCCC participation factors differ only by an increment equal to the difference between estimated and actual values for 1973.
d. Ratio of JCCC Frosh to number of 17 1/2 year old Johnson Countians for the same year.
e. JCCC Frosh-Soph survival coefficient.

TABLE 6

JCCC CONSTRUCTION AND SPECIAL BUILDING FUND CAPACITY ESTIMATES THROUGH 1993 ASSUMING A SLOWED TAX BASE GROWTH RATE (ASSUMPTION A)[a]

	Johnson County Tax Base			General Obligation Bonds			Special Building Fund[b]	
Year	Improvements	Cumulative Improvements	Valuation for Bonding Purposes	Bonding Capacity	Bonds Outstanding	Remaining Bonding Capacity	Amount Available[c]	Cumulative Amount Available
1969	10,912,235	10,912,235	286,490,640	14,324,532	--	--	--	--
1970	15,187,275	26,099,510	302,437,279	15,121,864	--	--	--	--
1971	12,372,865	38,472,375	315,428,787	15,771,439	--	--	109,096[d]	109,096
1972	16,749,045	55,221,420	333,015,285	16,650,764	--	--	160,811	269,907
1973	21,694,780	76,916,200	355,794,810	17,789,740	12,070,000	5,719,740	177,897	447,804
1974	15,383,240	92,299,440	371,947,210	18,597,360	11,600,000	6,997,360	185,974	633,778
1975	15,383,240	107,682,680	388,099,610	19,404,980	11,065,000	8,339,980	194,050	827,828
1976	15,383,240	123,065,920	404,252,010	20,212,100	10,465,000	9,747,100	202,126	1,029,954
1977	15,383,240	138,449,160	420,404,410	21,020,220	9,795,000	11,225,220	210,202	1,240,156
1978	15,383,240	153,832,400	436,556,810	21,827,840	9,075,000	12,752,840	218,278	1,458,434
1979	15,383,240	169,215,640	452,709,210	22,635,460	8,355,000	14,280,460	226,355	1,684,789
1980	15,383,240	184,598,880	468,861,610	23,443,080	7,625,000	15,818,080	234,431	1,919,220
1981	15,383,240	199,982,120	485,014,010	24,250,700	6,875,000	17,375,700	242,507	2,161,727
1982	15,383,240	215,365,360	501,166,410	25,058,320	6,080,000	18,978,320	250,583	2,412,310
1983	15,383,240	230,748,600	517,318,810	25,865,940	5,160,000	20,705,940	258,659	2,670,969
1984	15,383,240	246,131,840	533,471,210	26,673,560	4,240,000	22,433,560	266,736	2,937,705
1985	15,383,240	261,515,080	549,623,610	27,481,180	3,320,000	24,161,180	274,812	3,212,517
1986	15,383,240	276,898,320	565,776,010	28,288,800	2,400,000	25,888,800	282,888	3,495,405
1987	15,383,240	292,281,560	581,928,410	29,096,420	1,495,000	27,601,420	290,964	3,786,369
1988	15,383,240	307,664,800	598,080,810	29,904,040	630,000	29,274,040	299,040	4,085,409
1989	15,383,240	323,048,040	614,233,210	30,711,660	-0-	30,711,660	307,117	4,392,526
1990	15,383,240	338,431,280	630,385,610	31,519,280	-0-	31,519,280	315,193	4,707,719
1991	15,383,240	353,814,520	646,538,010	32,326,900	-0-	32,326,900	323,269	5,030,988
1992	15,383,240	369,197,760	662,690,410	33,134,520	-0-	33,134,520	331,345	5,362,333
1993	15,383,240	384,581,000	678,842,810	33,942,140	-0-	33,942,140	339,421	5,701,754

a. Assumption A: Assumes annual taxable, tangible improvements for the years 1974-1993 will be a constant equal to the average for the years 1969-1973.

b. Special Building Fund: May be used "for the purpose of construction, reconstruction, repair, remodeling, additions to, furnishing and equipping of school buildings, architectural expenses incidental thereto and the acquisition of building sites." Kansas Revised Statutes.

c. Assumes the Special Building Fund levy is extended every five years.

d. Levy for partial year.

TABLE 7

JCCC CONSTRUCTION AND SPECIAL BUILDING FUND CAPACITY ESTIMATES THROUGH 1993 ASSUMING CURRENT RATE OF TAX BASE GROWTH (ASSUMPTION B)[a]

	Johnson County Tax Base			General Obligation Bonds			Special Building Fund[b]	
Year	Improvements	Cumulative Improvements	Valuation For Bonding Purposes	Bonding Capacity	Bonds Outstanding	Remaining Bonding Capacity	Amount Available[c]	Cumulative Amount Available
1969	10,912,235	10,912,235	286,490,640	14,324,532	--	--	--	--
1970	15,187,275	26,099,510	302,437,279	15,121,864	--	--	--	--
1971	12,372,865	38,472,375	315,428,787	15,771,439	--	--	109,096[d]	109,096
1972	16,749,045	55,221,420	333,015,285	16,650,764	--	--	160,811	269,907
1973	21,694,780	76,916,200	355,794,810	17,789,740	12,070,000	5,719,740	177,897	447,804
1974	20,000,000	96,916,200	376,794,810	18,839,740	11,600,000	7,239,740	188,397	636,201
1975	20,000,000	116,916,200	397,794,810	19,889,740	11,065,000	8,824,740	198,897	835,098
1976	20,000,000	136,916,200	418,794,810	20,939,740	10,465,000	10,474,740	209,397	1,044,495
1977	20,000,000	156,916,200	439,794,810	21,989,740	9,795,000	12,194,740	219,897	1,264,392
1978	20,000,000	176,916,200	460,794,810	23,039,740	9,075,000	13,964,740	230,397	1,494,789
1979	20,000,000	196,916,200	481,794,810	24,089,740	8,355,000	15,734,740	240,897	1,735,686
1980	20,000,000	216,916,200	502,794,810	25,139,740	7,625,000	17,514,740	251,397	1,987,083
1981	20,000,000	236,916,200	523,794,810	26,189,740	6,875,000	19,314,740	261,897	2,248,980
1982	20,000,000	256,916,200	544,794,810	27,239,740	6,080,000	21,159,740	272,397	2,521,377
1983	20,000,000	276,916,200	565,794,810	28,289,740	5,160,000	23,129,740	282,897	2,804,274
1984	20,000,000	296,916,200	586,794,810	29,339,740	4,240,000	25,099,740	293,397	3,097,671
1985	20,000,000	316,916,200	607,794,810	30,389,740	3,320,000	27,069,740	303,897	3,401,568
1986	20,000,000	336,916,200	628,794,810	31,439,740	2,400,000	29,039,740	314,397	3,715,965
1987	20,000,000	356,916,200	649,794,810	32,489,740	1,495,000	30,994,740	324,897	4,040,862
1988	20,000,000	376,916,200	670,794,810	33,539,740	630,000	32,909,740	335,397	4,376,259
1989	20,000.000	396,916,200	691,794,810	34,589,740	-0-	34,589,740	345,897	4,722,156
1990	20,000,000	416,916,200	712,794,810	35,639,740	-0-	35,639,740	356,397	5,078,553
1991	20,000,000	436,916,200	733,794,810	36,689,740	-0-	36,689,740	366,897	5,445,450
1992	20,000,000	456,916,200	754,794,810	37,739,740	-0-	37,739,740	377,397	5,822,847
1993	20,000,000	476,916,200	775,794,810	38,789,740	-0-	38,789,740	387,897	6,210,744

a. Assumption B: Assumes annual taxable, tangible improvements for the years 1974-1993 will remain constant at the estimated current rate of 20 million dollars per year.

b. Special Building Fund: May be used "for the purpose of construction, reconstruction, repair, remodeling, additions to, furnishing and equipping of school buildings, architectural expenses incidental thereto and the acquisition of building sites." Kansas Revised Statutes.

c. Assumes the Special Building Fund levy is extended every five years.

d. Levy for partial year.

TABLE 8

JCCC CONSTRUCTION AND SPECIAL BUILDING FUND CAPACITY ESTIMATES THROUGH 1993 ASSUMING A MODERATELY ACCELERATED TAX BASE GROWTH RATE (ASSUMPTION C)[a]

	Johnson County Tax Base			General Obligation Bonds			Special Building Fund[b]	
Year	Improvements	Cumulative Improvements	Valuation For Bonding Purposes	Bonding Capacity	Bonds Outstanding	Remaining Bonding Capacity	Amount Available[c]	Cumulative Amount Available
1969	10,912,235	10,912,235	286,490,640	14,324,532	--	--	--	--
1970	15,187,275	26,099,510	302,437,279	15,121,864	--	--	--	--
1971	12,372,865	38,472,375	315,428,787	15,771,439	--	--	109,096[d]	109,096
1972	16,749,045	55,221,420	333,015,285	16,650,764	--	--	160,811	269,907
1973	21,694,780	76,916,200	355,794,810	17,789,740	12,070,000	5,719,740	177,897	447,804
1974	20,000,000	96,916,200	376,794,810	18,839,740	11,600,000	7,239,740	188,397	636,201
1975	20,800,000	117,716,200	398,634,810	19,931,740	11,065,000	8,866,740	199,317	835,518
1976	21,632,000	139,348,200	421,348,410	21,067,420	10,465,000	10,602,420	210,674	1,046,192
1977	22,497,280	161,845,480	444,970,550	22,248,527	9,795,000	12,453,527	222,485	1,268,677
1978	23,397,171	185,242,651	469,537,570	23,476,878	9,075,000	14,401,878	234,769	1,503,446
1979	24,333,057	209,575,708	495,087,280	24,754,364	8,355,000	16,399,364	247,544	1,750,990
1980	25,306,379	234,882,087	521,658,970	26,082,948	7,625,000	18,457,948	260,829	2,011,819
1981	26,318,634	261,200,721	549,293,530	27,464,676	6,875,000	20,589,676	274,647	2,286,466
1982	27,371,379	288,572,100	578,033,470	28,901,673	6,080,000	22,821,673	289,017	2,575,483
1983	28,466,234	317,038,334	607,923,010	30,396,150	5,160,000	25,236,150	303,961	2,879,444
1984	29,604,883	346,643,217	639,008,130	31,950,406	4,240,000	27,710,406	319,504	3,198,948
1985	30,789,078	377,432,295	671,336,660	33,566,833	3,320,000	30,246,833	335,668	3,534,616
1986	32,020,641	409,452,936	704,958,330	35,247,916	2,400,000	32,847,916	352,479	3,887,095
1987	33,301,466	442,754,402	739,924,870	36,996,243	1,495,000	35,501,243	369,962	4,257,057
1988	34,633,524	477,387,926	776,290,060	38,814,503	630,000	38,184,503	388,145	4,645,202
1989	36,018,864	513,406,790	814,109,860	40,705,493	-0-	40,705,493	407,055	5,052,257
1990	37,459,618	550,866,408	853,442,460	42,672,123	-0-	42,672,123	426,721	5,478,978
1991	38,958,002	589,824,410	894,348,360	44,717,418	-0-	44,717,418	447,174	5,926,152
1992	40,516,322	630,340,732	936,890,490	46,844,524	-0-	46,844,524	468,445	6,394,597
1993	42,136,974	672,477,706	981,134,390	49,056,719	-0-	49,056,719	490,567	6,885,164

a. Assumption C: Assumes annual taxable, tangible improvements for the years 1974-1993 will increase at the rate of 4 percent per year.

b. Special Building Fund: May be used "for the purpose of construction, reconstruction, repair, remodeling, additions to, furnishing and equipping of school buildings, architectural expenses incidental thereto and the acquisition of building sites." Kansas Revised Statutes.

c. Assumes the Special Building Fund levy is extended every five years.

d. Levy for partial year.

TABLE 9

JCCC OPERATING REVENUE ESTIMATES THROUGH 1993 WITH AND WITHOUT TAX LID LAW LIMITATIONS

Year	ΔFTE	Actual Assessed Valuation[a]	Ad Valorem--5 Mill Levy (Approx.)				Revenue Σ(Tuition + State Aid + Out-District)[f]	Grants and Miscellaneous	Total	
			Full Levy	Restricted Levy[c]						
			Total[b]	Vocational	General	Total[d]			Full Levy	Restricted Levy[c]
1965-66	--	213,423,454	--	--	--	--	--	--	--	--
1966-67	--	230,826,954	--	--	--	--	--	--	--	--
1967-68	--	243,533,590	--	--	--	--	--	--	--	--
1968-69	--	261,935,994	--	--	--	--	--	--	--	--
1969-70	964	379,607,329	--	--	--	--	--	--	--	--
1970-71	1732	500,939,126	--	599,780	876,893	1,476,673	--	--	--	--
1971-72	2131	529,155,547	--	663,052	1,059,915	1,722,967	--	--	--	--
1972-73	2364	562,545,024	--	595,067	1,240,746	1,835,813	--	--	--	--
1973-74	2643	604,646,373	3,023,232	617,261[e]	1,418,024[e]	2,035,285[e]	2,129,436[e]	300,000[e]	--	--
1974-75	2822	644,000,000	3,220,000	--	--	2,235,000	2,271,710	300,000	5,791,710	4,806,710
1975-76	2975	684,000,000	3,420,000	--	--	2,435,000	2,394,875	300,000	6,114,875	5,129,875
1976-77	3211	724,000,000	3,620,000	--	--	2,635,000	2,584,855	300,000	6,504,855	5,519,855
1977-78	3443	764,000,000	3,820,000	--	--	2,835,000	2,771,615	300,000	6,891,615	5,906,615
1978-79	3604	804,000,000	4,020,000	--	--	3,035,000	2,901,220	300,000	7,221,220	6,236,220
1979-80	3668	844,000,000	4,220,000	--	--	3,235,000	2,952,740	300,000	7,472,740	6,487,740
1980-81	3718	884,000,000	4,420,000	--	--	3,435,000	2,992,990	300,000	7,712,990	6,727,990
1981-82	3798	924,000,000	4,620,000	--	--	3,635,000	3,057,390	300,000	7,977,390	6,992,390
1982-83	3821	964,000,000	4,820,000	--	--	3,835,000	3,075,905	300,000	8,195,905	7,210,905
1983-84	3797	1,004,000,000	5,020,000	--	--	4,035,000	3,056,585	300,000	8,376,585	7,391,585
1984-85	3783	1,044,000,000	5,220,000	--	--	4,235,000	3,045,315	300,000	8,565,315	7,580,315
1985-86	3785	1,084,000,000	5,420,000	--	--	4,435,000	3,046,925	300,000	8,766,925	7,781,925
1986-87	3818	1,124,000,000	5,620,000	--	--	4,635,000	3,073,490	300,000	8,993,490	8,008,490
1987-88	3888	1,164,000,000	5,820,000	--	--	4,835,000	3,129,840	300,000	9,249,840	8,264,840
1988-89	3972	1,204,000,000	6,020,000	--	--	5,035,000	3,197,460	300,000	9,517,460	8,532,460
1989-90	4060	1,244,000,000	6,220,000	--	--	5,235,000	3,268,300	300,000	9,788,300	8,803,300
1990-91	4166	1,284,000,000	6,420,000	--	--	5,435,000	3,353,630	300,000	10,073,630	9,088,630
1991-92	4295	1,324,000,000	6,620,000	--	--	5,635,000	3,457,475	300,000	10,377,475	9,392,475
1992-93	4457	1,364,000,000	6,820,000	--	--	5,835,000	3,587,885	300,000	10,707,885	9,722,885
1993-94	4636	1,404,000,000	7,020,000	--	--	6,035,000	3,731,980	300,000	11,051,980	10,066,980

a. Valuation is for calendar year in which the school year begins.

b. Calculated value approximated by assuming all levy is collected in a single calendar year.

c. Levy restricted due to tax lid law limitations.

d. Estimated values for 1974-1993 assumes a constant increase equal to the approximate average of the previous three increases.

e. Estimated.

f. Total = Tuition + State Aid + Out-District = 390N + 392N + 23N = 805N .. assumes no change in rates, in-district:out-district ratios, summer:fall:spring enrollment ratios.

TABLE 10

JCCC OPERATING EXPENDITURE ESTIMATES THROUGH 1993 FOR 2.5% AND 5% GROWTH OF EXISTING BUDGET SUPPLEMENTED BY LIMITED INSTRUCTIONAL STAFF GROWTH TO ACCOMMODATE STUDENT GROWTH[a]

			2.5 Percent Growth					5.0 Percent Growth				
Year	FTE	FTE	Cumulative Growth	Budget for Existing Staff	Cost/FTE of Additional Staff	Budget for Added Staff	Total Budget	Cumulative Growth	Budget for Existing Staff	Cost/FTE of Additional Staff	Budget for Added Staff	Total Budget
1973-74	2643	0	--	4,467,000	400[b]	0	4,467,000	--	4,467,000	400	0	4,467,000
1974-75	2822	179	1.0250	4,578,675	410	73,390	4,652,065	1.0500	4,690,350	420	75,180	4,765,530
1975-76	2975	332	1.0506	4,693,030	420	139,440	4,832,470	1.1025	4,924,868	441	146,412	5,071,280
1976-77	3211	568	1.0769	4,810,512	431	244,808	5,055,320	1.1576	5,170,999	463	262,984	5,433,983
1977-78	3443	800	1.1038	4,930,675	441	352,800	5,283,475	1.2155	5,429,639	486	388,800	5,818,439
1978-79	3604	961	1.1314	5,053,964	452	434,372	5,488,336	1.2762	5,700,785	511	491,071	6,191,856
1979-80	3668	1025	1.1597	5,180,380	464	475,600	5,655,980	1.3400	5,985,780	536	549,400	6,535,180
1980-81	3718	1075	1.1887	5,309,923	475	510,625	5,820,548	1.4071	6,285,516	563	605,225	6,890,741
1981-82	3798	1155	1.2184	5,442,593	487	562,485	6,005,078	1.4774	6,599,546	591	682,605	7,282,151
1982-83	3821	1178	1.2489	5,578,836	500	589,000	6,167,836	1.5513	6,929,657	621	731,538	7,661,195
1983-84	3797	1154	1.2801	5,718,207	512	590,848	6,309,055	1.6289	7,276,296	652	752,408	8,028,704
1984-85	3783	1140	1.3121	5,861,151	525	598,500	6,459,651	1.7103	7,639,910	684	779,760	8,419,670
1985-86	3785	1142	1.3449	6,007,668	538	614,396	6,622,064	1.7959	8,022,285	718	819,956	8,842,241
1986-87	3818	1175	1.3785	6,157,760	551	647,425	6,805,185	1.8856	8,422,975	754	885,950	9,308,925
1987-88	3888	1245	1.4130	6,311,871	565	703,425	7,015,296	1.9799	8,844,213	792	986,040	9,830,253
1988-89	3972	1329	1.4483	6,469,556	579	769,491	7,239,047	2.0789	9,286,446	832	1,105,728	10,392,174
1989-90	4060	1417	1.4845	6,631,262	594	841,698	7,472,960	2.1829	9,751,014	873	1,237,041	10,988,055
1990-91	4166	1523	1.5216	6,796,987	609	927,507	7,724,494	2.2920	10,238,364	917	1,396,591	11,634,955
1991-92	4295	1652	1.5596	6,966,733	624	1,030,848	7,997,581	2.4060	10,747,602	963	1,590,876	12,338,478
1992-93	4457	1814	1.5986	7,140,946	639	1,159,146	8,300,092	2.5269	11,287,662	1,011	1,833,954	13,121,616
1993-94	4636	1993	1.6386	7,319,626	655	1,305,415	8,625,041	2.6533	11,852,291	1,061	2,114,573	13,966,864

a. Assumption: 1973-74 budget expands at specified rate plus that amount required for additional instructional staff salaries.

b. Additional staff assumed to be ½ full-time and ½ part-time. Initial rates assumed to be $10,000/year and $200/credit hour respectively. Slightly less than 20 students per class assumed.

UNIVERSITY OF CALIF
LOS ANGELES

JAN 17 1975

CLEARINGHOUSE FOR
JUNIOR COLLEGE
INFORMATION